## ABSTRACT OF THE DISCLOSURE

An exhaust gas purifying system for an internal combustion engine of an automotive vehicle. The exhaust gas purifying system includes an exhaust gas purifying catalyst disposed in an exhaust gas passage of the engine to remove an exhaust gas component. A concentration sensor is disposed in the exhaust gas passage downstream of the exhaust gas purifying catalyst to detect a concentration of the exhaust gas component. Additionally, a control unit is provided programmed to carry out (a) detecting an activity transition time at which the exhaust gas purifying catalyst changes from an inactive state to an active state, in accordance with the concentration of the exhaust gas component detected by the concentration sensor, and (b) judging a deterioration of the exhaust gas purifying catalyst at the activity transition time.